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The Gift of



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to help vanquish depression marked by "morning tiredness"

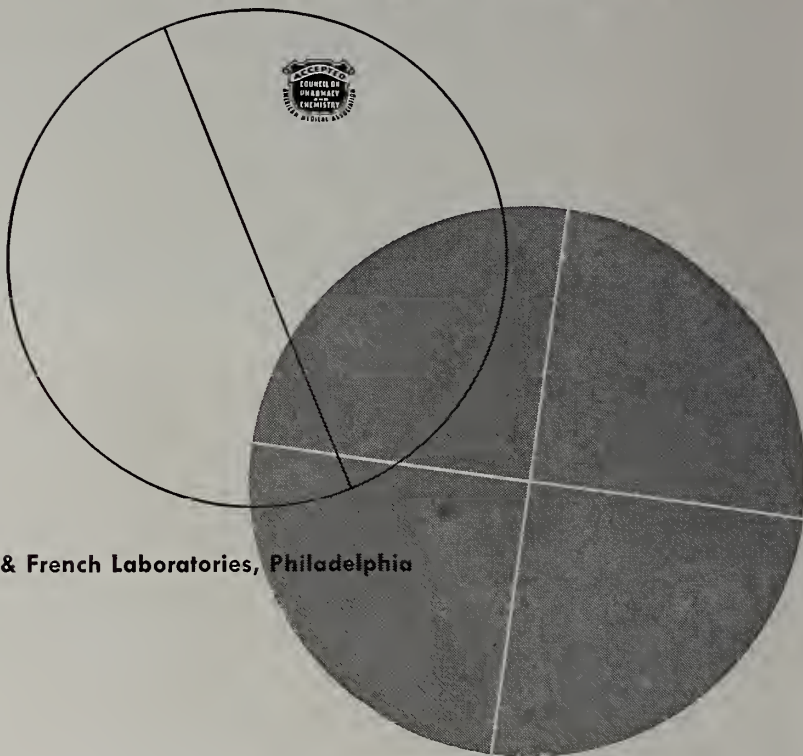
Many depressions are marked by morning tiredness, inertia, lassitude and retardation. 'Benzedrine' Sulfate, taken on awakening, frequently helps to lift the patient "over the hump" of the early hours.

Benzedrine Sulfate—where it shortens, eases, or even eliminates the patient's struggle with depression—may improve the tone of his entire day. While not always effective, Benzedrine Sulfate therapy certainly merits a fair clinical trial in depression marked by morning tiredness.

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BACKGROUND

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infant feeding that consistently, for over three decades, has received universal pediatric



recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

1941



1945

HARVARD MEDICAL SCHOOL

DEDICATED TO THE MEMORY OF THOSE
WHO GAVE THEIR LIVES IN THE SERVICE
OF THEIR COUNTRY

LEON CHAPELLE AGEE
WALLACE RIDEOUT BRIGGS
PHILIP WILLIAM CAREY
ROBERT HARPER CLARKSON
ROGER SHERMAN DOWNS
JAMES CANFIELD FISHER
WILLIAM CRAIG FLINN
SIDNEY CHASE GRAVES
CHARLES DAVID HORN
JOHN DEETZ HOUCK
ROBERT SATTERLEE HURLBUT
DANIEL JOSEPH HURLEY
MEINOLPH VALEN KAPPIUS
JOHN ROSS MARSHALL
WILLIAM HENRY MATHEWS
JOSEPH DAVID PICCIOTTI
WOODMAN BRADBURY POMEROY
IRVING FREDERICK RIDER
NORMAN MORRIS RIUNG
THEODORE PARKS ROBIE
FRANCIS CLAY ROBINSON
ROBERT SANDERSON
FREDERICK JAMES CUNNINGHAM SMITH
JOSÉ LUIS TRUJILLO-BRAVO
WARD ROBERT VINCENT
CHARLES EDWARD WALKER JR
STAFFORD MANCHESTER WHEELER
ARTHUR WILLIAM WILKINSON
LUCIUS TOWNSHEND WING
EDWARD LORRAINE YOUNG III



Medical School Notes



MEDICAL SCHOOL WIVES

From 57 in 1941 to 135 in 1948! The wives of Harvard medical students are growing in number with each passing year, and there are many of us who feel that that is a very fine thing! This is hardly meant to bring before you a discussion on why the number of married medical students is increasing at HMS, or elsewhere; let it suffice to say only that it is and that the Harvard Medical Wives Association grows larger and more organized each year.

As far as is known there never was any official organization of the wives of the Harvard medical students before the war years. Previously, the small group of wives, whose circumstances for the most part were very similar, had had only their own social contacts. However, the large number of wives from every section of the country that were in Boston at that time seemed to warrant a more official form of contact. At first a comparatively large number of girls met at different houses, but this became increasingly difficult because of the size of the meetings and also because of the distance to some of the meeting places. In 1943, largely through Mrs. Burwell's interest and efforts, a room was obtained in Building A of the Medical School for their use. This room, which had been the cafeteria for the students before Vanderbilt Hall was built, was painted by the School and by the end of 1943 had been decorated by Wives of Aesculapius. Since that time they have changed the room which had been a cafeteria and then a storage room into a very pleasant meeting place.

The purpose of an organization for the wives of Harvard medical students has never changed in that it is still primarily for the pleasure and benefit of the girls themselves. However, during the war the group was asked to roll bandages for the

Peter Bent Brigham Hospital and this was done quite actively for several years. The need still exists for such help and a certain amount of it is done now. The Association is also open to any ideas wherein we can help within our limitations. For several years now each Christmas the girls have been asked to bring a small present in for one of the settlement houses in town; and on occasion various wives have assisted other organizations in some useful work.

The Association now meets regularly every 1st and 3rd Thursday of the month throughout the school year and all wives of the medical students are urged to come, all wives of former students are welcomed as well as any friends of either group, and recently the invitation has included all female medical students. To the best of our knowledge there has been more active interest in the organization this year than ever before, possibly due to the larger number of girls. The number of wives at any particular meeting varies radically, as does the program. The latter is arranged entirely by two volunteer hostesses for the evening and ranges from an evening of bandage rolling to a guest speaker. The HMWA has no outside affiliations and with the exception of contact with the Wives of Aesculapius stay well within our own confines. It has been found each year that all the wives are agreed they would like to have an official "open-house" on a chosen night for the Wives of Aesculapius. This seems but a small way to show our appreciation for all they have done for us, and from a selfish point of view it gives the younger wives an opportunity to meet the wives of the professors their husbands speak of so often.

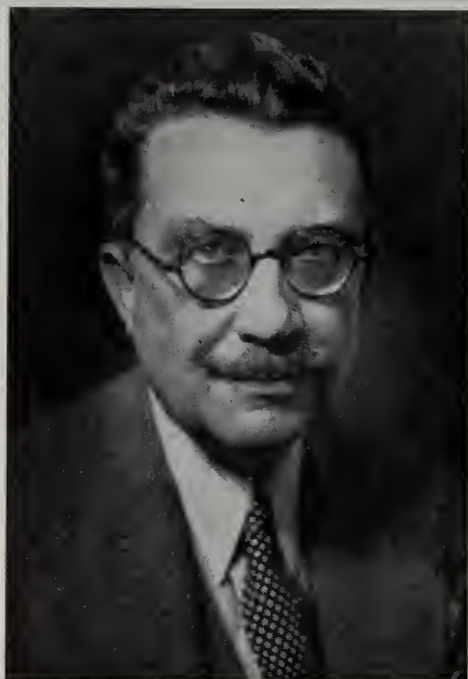
Having achieved an official "club room" and with interest growing each year in the Association the present members are well

pleased and have only one regret. As things are now, contact is completely lost with the individual girls as soon as their husbands graduate. This is true even when the boys intern in the city, and from our point of view we wish we could see more of the "older girls". As it is now, at each meeting one invariably hears a bit of news of a past member and this is always eagerly received.

(The above article was written by *Barbara Brinton Caul*, wife of Edward H. Caul, '48. Mrs. Caul is *Secretary of the HMWA*.)

DERMATOLOGY

Of the first importance is the announcement of the appointment of Chester North Frazier to be Edward Wigglesworth Professor of Dermatology and Chief of the Dermatology Service at the Massachusetts General Hospital.



Walter Burns Studios

Dr. Frazier comes to Harvard from the University of Texas where he has been the Head of the Department of Derma-

tology. He was born in Portland, Indiana on January 27, 1892, and graduated from Indiana University in 1915. He received his M.D. degree from Indiana in 1917. He served in the Army Medical Corps during World War I. Following this he spent 20 years teaching at the Peiping Union Medical College in China. During this time he did much research in skin diseases among the Chinese, determining racial and sex variations in syphilis. He also investigated various aspects of leprosy, "Hongkong foot," scalp infection, impetigo and later the uses and mode of action of penicillin. It is said that there are few if any Chinese dermatologists who do not owe the greater part of their training to Dr. Frazier.

In 1945 he received the degree of Doctor of Public Health from Johns Hopkins University.

Dr. Frazier's special interest throughout his medical career has been the correlation of the study of diseases of the skin with advances of general medicine. He is a dermatologist with a stethoscope, who believes that the specialist in skin is just a medical man and that research is more productive than a preoccupation with unguents and lotions.

His program of research at Harvard will be aided by a grant from the Rockefeller Foundation, it will bring recent advances in physiology and biochemistry to bear in a search for new knowledge of skin diseases. It will be based on close co-operation between dermatologists and experts in general medicine.

UNDERGRADUATE ASSEMBLY

The Eighth Annual Undergraduate Assembly of the Harvard Medical School held on May 13 in Amphitheatre D at the School was attended by members of the Faculty and student body.

Dr. George R. Minot instigated the Assembly eight years ago for the purpose of giving students an opportunity to present results of their research in some field of science to the undergraduates. The

members of the Committee for the Undergraduate Assembly have attempted to encourage those students who are interested in research and to help them find opportunities for work in the field in which they are interested.

The program for the Undergraduate Assembly consists of six or eight papers presented by the students, allowing fifteen minutes for presentation and discussion of each paper; an informal intermission during which refreshments are served; and the awarding of the Soma Weiss Award by the Faculty Judges to the writer of the paper judged best on the basis of merit, originality, and interest. This year a second prize was also awarded. In past years a well-known guest speaker has been included as a part of the program, but this year the Committee for the Undergraduate Assembly deemed it more advisable to omit the guest speaker, thereby offering no distraction to the worth and interest of the student papers.

Faculty Judges were Doctors James L. Gamble, Eugene M. Landis, Francis D. Moore, J. Howard Mueller and George W. Thorn.

Students interested in presenting work at the Assembly submit summaries of their papers, and these summaries are reviewed by a committee of Faculty Advisors. In this way the papers to be presented are chosen on the same basis mentioned above for judging them. The Faculty Advisors for this year were Doctors Eric G. Ball, William W. Beckman, Francis S. Cheever, Clement A. Finch, Otto Krayner, and Arnold M. Seligman.

The Soma Weiss Award of \$35 was presented to Robert E. Olson, a first year student, for his paper on *The Effect of*

Biotin Deficiency Upon the Respiration of Cardiac Muscle in Ducklings. This work was done in the Department of Nutrition under Dr. Fredrick J. Stare. Uptake of oxygen and utilization of pyruvate and lactate by heart muscle slices were measured in the Warburg apparatus.

Jock Cobb, fourth year, was presented with a second prize of \$15 for his paper entitled *Radio-Autographs*. He developed methods for allowing microscopic sections of tissue containing radio-active isotopes to register on photographic film the location of the isotope within the tissue. The work was done in the Department of Biophysics.

Other papers presented were: *Fluctuation in Virulence of Trypanosoma Lewisi*, and *a More Accurate Method of Measuring the Virulence* by Glenn N. Yanagi, first year; *Choices of Salt and Water by Normal and Hypertensive Rats Before and After Recovery from Adrenalectomy* by Daniel C. Tosteson, Research Fellow in Physiology; *Slide Culture Method* (for detecting early bacterial growth) by L. D. Wojcik, third year; and *The Action of Anti-lymphocytic Agents on Experimental Hypersensitivity: Progress Report* by Thomas Hall, third year.

The Committee for the Undergraduate Assembly included in its membership Malcolm Clark, IV Year, Edward Evarts, IV Year, David M. Gibson, IV Year, Howard H. Hiatt, IV Year, Daniel C. Tosteson, Research Fellow in Physiology, Sam L. Clark, Jr., III Year, Robert S. Gordon, Jr., III Year, Adolf Gundersen, III Year, Frank Williams, II Year, and Norman Geschwind, I Year.

SAM L. CLARK, JR.
Secretary



Thirty-Fifth Birthday Peter Bent Brigham Hospital



HERSEY PROFESSORS OF THE THEORY AND PRACTICE OF PHYSIC, Physicians-in-Chief, Peter Bent Brigham Hospital; Henry A. Christian 1913-1939; George W. Thorn 1942—.

In 1877 Peter Bent Brigham, a business man of Boston, died, leaving the bulk of his estate to accumulate for 25 years and then to be used to establish a hospital "for the care of sick persons in indigent circumstances residing in the county of Suffolk." Wisely, the trustees decided that the donor's intent would be best realized if the hospital could be brought close, both geographically and spiritually, to the Harvard Medical School which in 1906 moved to its imposing marble halls on Longwood Avenue.

This was accomplished, and on January 27, 1913, the first patient was admitted to the nearly completed, rather "modernistic," pavilion-type hospital across the street from Building A. The Surgeon-in-Chief and Physician-in-Chief were appointed as senior professors in the Medical School, and the house staff included not only internes, but "assistant residents" and "resi-

dents" after the new scheme of post-graduate training developed by Osler and Halsted at the Johns Hopkins Medical School in Baltimore. Since 1913 some 900 young doctors have served as interne, assistant resident, resident, or fellow in medicine, surgery, pathology, and roentgenology. A considerable proportion of these have chosen academic careers; 106 have achieved the rank of professor and fifty-six assistant or associate professor in their fields. The smallness of the hospital, its youth, and the continuity of the residency system have all played a part in the development of the Brigham tradition which can only be described by the hoary cliché, "happy family."

Five hundred and forty-four members of the family, 217 doctors and 327 nurses assembled from thirty-two states, five foreign countries, and Texas, to celebrate the hospital's thirty-fifth birthday on May 6,



"... of course I'm just a country doctor". Tom Spies, Chairman of the Department of Nutrition and Metabolism, Northwestern University.



"... and I submit that the so-called Homan's Sign is not particularly hot." John Homans, Clinical Professor of Surgery, *Emeritus*



CUSHING PUPILS: Francis C. Newton, Assistant Professor of Surgery; Bronson S. Ray, Associate Professor of Surgery (Cornell).



NEUROSURGERY AND PATHOLOGY. Franc D. Ingraham and S. Burt Wolbach.



J. Englebert Dunphy, Norbert A. Wilhelm, James B. Blodgett, George W. Thorn, Thomas B. Quigley.

7, and 8. Thirty-five short papers were read, thirty by returning alumni, on subjects in every field of medicine, ranging from *Chemotherapy in Ocular Tuberculosis* by Alan C. Woods to *Don't Throw the Stethoscope Away* by Samuel A. Levine. The last lantern slide in Dr. Levine's paper struck a telling blow in the well known (and apparently endless) Sosman versus Levine controversy on the relative merits of roentgenography and physical diagnosis. Dr. Sosman was portrayed in faked photos practicing auscultation on the thorax of Dr. Levine.

Routine teaching exercises were continued throughout the meeting. At the regular weekly clinical-pathological conference Dr. S. B. Wolbach was, by overwhelming sadistic popular demand, placed for the first time in his career, in the position of clinician and played his part with distinction.

Despite numerous cocktail parties and buffet suppers on the afternoon of May 6, all of the seats for that evening's Pops Concert were occupied, to the considerable profit of the Friends of the Brigham and Nurses Alumnae Association who sponsored the affair.

The only speech at the dinner dance at the Hotel Vendome on the evening of May 7 was by Robert Cutler, Treasurer of the Hospital and member of the Board of Trustees. Mr. Cutler presented a realistic picture of the present financial position of the Hospital. It was, on the whole, an optimistic picture, and the Brigham Family was assured that, while dollars seemed harder to come by and to hang on to in New England than elsewhere, there was life in the old girl yet and she would be going strong when the next reunion rolled around in 1953.

THOMAS B. QUIGLEY, '33



MASTER OF THE MAGIC LANTERN. Merrill C. Sosman, Professor of Radiology



VISITOR FROM THE WEST. Robert M. Zollinger, Professor of Surgery, Ohio State Medical School.

The Practice of Medicine and the Preventive Point of View

DAVID D. RUTSTEIN, M.D.
Professor of Preventive Medicine

The Department of Preventive Medicine is in the process of reorganization in accordance with recommendations submitted by the ad hoc Committee on Preventive Medicine.* The report of this Committee urged a shift in emphasis in the teaching of preventive medicine from that knowledge which usually concerns the public health officer to that which concerns the practicing physician.

In this reorganization, one basic assumption has been made. It is assumed that the practicing physician has the responsibility for the prevention of disease, disability and death among his patients and their families, in addition to his recognized responsibility as a diagnostician and purveyor of therapeutic agents and procedures.

The Department is therefore concerned with the development of a teaching and research program which would implant a preventive point of view in the minds of medical students, and bring new knowledge to this field. The program of the Department can be summarized in the following three objectives:

- 1) The teaching of preventive medicine to medical students so that they, as future practicing physicians, will integrate preventive concepts with the actual care of their individual patients;
- 2) Research in the field of preventive medicine, particularly in the preventive aspects of cardiovascular disease;
- 3) Guidance of selected medical students into a career in preventive medicine and public health.

This discussion is concerned with the first of these objectives.

In the curriculum of the Medical School, the Department of Preventive Medicine is responsible for the teaching of the following subjects:

- 1) The preventive aspects of clinical medicine;
- 2) Epidemiology, and the natural history of disease;
- 3) Social medicine and medical economics;
- 4) Industrial medicine;
- 5) Biostatistics necessary for the evaluation of the medical literature;
- 6) Environmental sanitation.

There is good evidence that medical students in the past have been hypersensitive to, and have reacted against teaching labeled as "preventive medicine." Moreover, the teaching programs of the various departments of the School contain much material which is preventive in concept and which is acceptable to the medical student because it does not bear that label. It therefore seemed desirable, insofar as possible, to coordinate the teaching of preventive and curative medicine. In the teaching of the preventive aspects of clinical medicine, liaison arrangements have been made with the other departments in the School so that preventive information may be integrated with their existing teaching programs. The ultimate objective is the introduction of the preventive point of view into the discussion of each case in the clinic or on the ward.

Conversely, clinical material has been interwoven in the formal teaching of preventive medicine in the third year. How this is accomplished will become evident in the outlines of teaching sessions which appear below.

In discussing the epidemiology and natural history of disease, the evolution of a disease in an individual and its distribution through the community is described, and illustrated with clinical material. An example of this is the outline

*Members of this Committee were: Walter Bauer, M.D., Chairman; Charles S. Davidson, M.D.; John F. Enders, Ph.D.; Henry M. Fox, M.D.; Charles A. Janeway, M.D.; and George R. Minot, M.D.

of two three-hour sessions on rheumatic fever which follows:

SESSION I.

- 1) Importance of the problem, Dr. David D. Rutstein.
- 2) The hemolytic streptococcus and immunological mechanisms in rheumatic fever, Dr. Albert H. Coons.
- 3) Hyaluronic acid and hyaluronidase in rheumatic fever, Dr. Joseph Warren.
- 4) Epidemiology and etiology of rheumatic fever, Dr. David D. Rutstein.
- 5) Diagnosis and treatment of acute rheumatic fever, Dr. Benedict F. Massell.

SESSION II.

- 1) Prognosis of acute rheumatic fever and evolution of rheumatic heart disease, Dr. Edward F. Bland.
- 2) Medical social service in rheumatic fever, Miss Ethel Cohen.
- 3) Public health nursing in rheumatic fever, Miss Elizabeth Barry.
- 4) Diagnosis of rheumatic heart disease, Dr. Howard B. Sprague.
- 5) Subacute bacterial endocarditis, Dr. Oglesby Paul.
- 6) Diagnosis and treatment of congestive cardiac failure, Dr. T. Duckett Jones.
- 7) The community rheumatic fever program, Dr. David D. Rutstein.

This principle has been re-emphasized in similar presentations of the natural history of other diseases such as cancer, epilepsy and certain of the communicable diseases. No attempt is made in the limited time available to cover all diseases in this fashion, but the general principle is stressed.

The students have also been exposed to the many points of view in the fields of social medicine and medical economics, as indicated in the following program:

SESSION I.

Medical Care: Needs and Assets

- a. The sickness problem in the United States, Dr. Franz Goldmann.
- b. Distribution of personnel and facilities and controlling factors in distribution, Mr. Elliot H. Pennell.

SESSION II.

Foreign Experience in Medical Care

- a. Trends in other countries, Dr. John B. Grant
- b. Great Britain and the Scandinavian countries, Dr. Hugh R. Leavell.
- c. The Peckham Experiment, Dr. Innes H. Pearse.

SESSION III.

Group Practice

- a. General Information, Dr. G. Halsey Hunt.
- b. Experience in a prepayment plan, Dr. Dean A. Clark.

SESSION IV.

Hospital Services

- a. The national program, Dr. Vane M. Hoge.
- b. The individual hospital, Dr. Nathaniel W. Faxon.

SESSION V.

Voluntary Medical Care Insurance

- a. General principles, Dr. Franz Goldmann.
- b. Blue Cross and Blue Shield plans, Dr. Louis S. Reed.
- c. Other plans, Dr. Franz Goldmann.

SESSION VI.

The Point of View of Organized Medicine

- a. National, Dr. Morris Fishbein.
- b. State, Dr. Elmer S. Bagnall.
- c. Local, Dr. Charles C. Lund.

SESSION VII.

The Present Situation in Regard to

- a. Public medical care, Dr. Franz Goldmann.
- b. The health bills now before Congress, Dr. Allan M. Butler.

The program follows a pattern established a few years ago by Dr. T. Duckett Jones and permits the student to form his own conclusions after thorough exposure to the many controversial points of view existing in this field.

In the teaching of industrial medicine, excellent cooperation has been secured from members of other departments in the Medical School and from members of the Faculty of the Harvard School of Public Health, as indicated in the following outline:

SESSION I.

1. General introduction to industrial hygiene problems, Dr. Joseph C. Aub.
2. Heavy Metals.
 - a. Introduction to the problem, Dr. Joseph C. Aub.
 - b. Types of metals concerned, Dr. Joseph C. Aub.
 - c. Pathologic physiology, Dr. Joseph C. Aub.
 - d. Mode of action of B.A.L., Dr. Eric G. Ball.
 - e. Clinical aspects-medical and neurologic, Dr. Joseph C. Aub.
 - f. Treatment, Dr. Joseph C. Aub.
 - g. Control and prevention. Prof. Philip Drinker.

SESSION II.

1. Pneumonoconioses
 - a. Etiologic agents and their sources, Prof. Philip Drinker.
 - b. General pathologic and clinical description, including pathologic physiology, Dr. Alan R. Moritz.
 - c. Roentgenological aspects, Dr. Merrill C. Sosman.
 - d. Relationship to tuberculosis, Dr. Donald S. King.
 - e. Control, Prof. Philip Drinker.

SESSION III.

1. Toxic gases: pathologic and clinical aspects
 - a. Bone marrow poisons, Dr. Francis T. Hunter.
 - b. Neurologic poisons, Dr. Joseph C. Aub.
 - c. Kidney and liver poisons, Dr. Joseph C. Aub.
 - d. Control, Prof. Philip Drinker.

SESSION IV.

1. Industrial dermatoses, Dr. G. Marshall Crawford.
2. Industrial health services and the practicing physician, Dr. Sherman S. Pinto and Prof. Philip Drinker.

The teaching of biostatistics has been delayed because of lack of staff and inadequate financial support. Next year it is planned to teach biostatistics in order to make it easier for the students to evaluate the medical literature and to make it possible for them to distinguish between good and bad medical writing. With such a background, it should be easier for them, as practicing physicians, to keep up with advances in medicine. In order to accomplish this, tentative cooperative arrangements have already been made with other departments for the interweaving of biostatistical information into existing laboratory exercises, and for sessions in the course in preventive medicine where medical papers of varying quality will be compared. The biostatistical staff will also provide consultation service to re-

search workers throughout the Medical School and will cooperate in the research program of the Department.

Environmental sanitation has been woven into the teaching of those diseases where environmental control is important. This is presented from the point of view of the practicing physician, and those matters which are primarily the concern of the public health officer or the sanitary engineer are not included in the Medical School teaching.

The alumni of the Harvard Medical School will probably well remember their experience with the sanitary survey which has been a requirement in the course in preventive medicine for approximately thirty years. With the shift in the emphasis of preventive medicine, the usefulness of the sanitary survey has gradually diminished. The survey now being undertaken will be focused on those facilities available in communities for the assistance of the practicing physician in the care of his patients. Therefore, the students have been requested to survey a community from the point of view of a physician just beginning the practice of medicine and faced with the problem of providing adequate care for his first four patients. Case histories are provided to the students, and they are then asked to compare theoretically optimum facilities with those which actually exist for the care of such patients in the community in which they plan to practice. In his report, the student is requested to discuss discrepancies and make recommendations.

The present approach to the teaching of preventive medicine is in the nature of an experiment. It is to be hoped that it will result in the training of physicians who will practice preventive as well as curative medicine.

Harvard Medical Society Meetings

MEETING No. 7

The Harvard Medical Society met on the evening of April 13 in Building D Amphitheater. Dr. Eppinger presided at a meeting reporting recent investigations done in the Peter Bent Brigham Hospital.

The Uptake of Radioactive Phosphorus by Gastric Carcinoma by J. Schulman, Jr., S. J. Gray and M. Falkenheim was the first paper. Dr. Schulman presented the work. They injected NaH_2PO_4 containing radioactive phosphorus into patients before gastric resection. The concentrations of radioactive phosphorus in nucleoprotein, phospholipid, and acid soluble fractions of the subsequently excised stomach were measured. They found the turnover of radioactive phosphorus in the phospholipid and nucleoprotein fractions to be significantly greater in carcinomatous tissue than in non-malignant gastric tissue. The concentration of radioactive phosphorus in the acid soluble fraction was slightly, but not significantly greater in cancerous tissue.

W. P. Harvey and S. A. Levine discussed *Relief of Anginal Pain by Carotid Sinus Stimulation*. Dr. Harvey read the paper. The procedure was tried in 40 different patients during a total of 50 anginal attacks. In 45 of the experiments, carotid pressure on either side resulted in a decrease in heart rate. Complete relief of pain was associated with the cardiac deceleration in 70% of attacks. In 30% of the attacks, slowing of the heart rate was concomitant with partial relief from anginal pain. The 5 cases in which carotid pressure did not slow the heart showed no diminution of anginal pain. Carotid pressure was tried in 60 patients suffering from acute pain of various origins, (e.g., fracture, colic). In 7 of these cases some relief of pain was noted. Dr. Landis and Dr. Levine contributed to the ensuing discussion.

Studies of the *Pulmonary Capillary Pressure in Man* were described by H. K. Hellems, F. W. Haynes, J. F. Gowdey

and L. Dexter. They inserted a small catheter (A6-9) as far as possible into a small pulmonary artery. A sample of blood obtained through the catheter was fully saturated with oxygen, indicating that the tip of the catheter was in direct communication with a pulmonary capillary. Pressures of 7 to 11 mm. Hg in the normal subject were measured by a Hamilton manometer and checked by a saline manometer. Mean pulmonary capillary pressure was essentially normal in the cases of emphysema, pulmonary vascular disease, and Eisenmenger's complex studied. In 5 cases of mitral stenosis and 5 cases of left heart failure, mean pulmonary capillary pressures of from 19 to 38 mm. Hg were recorded. Exercise caused mean pulmonary pressure to rise slightly in normal subjects and in patients with emphysema, but caused a marked elevation in patients suffering from mitral stenosis.

The Circulatory Dynamics in Pulmonary Vascular Disease were discussed by J. W. Dow, J. L. Whittenberger, E. C. Eppinger, and H. P. Brean. 4 patients, all complaining chiefly of dyspnea, were studied. (1 case of "primary pulmonary vascular disease", 1 case of generalized arteriosclerosis, 1 case of probable multiple pulmonary emboli, and 1 case of advanced pneumoconiosis.) The mean pulmonary capillary pressure was normal in all cases studied. Pulmonary arterial hypertension was observed in varying degree in all 4 patients. Furthermore, the pulmonary arterial blood pressure rose more in response to exercise than it does in the normal subject. On the basis of this data, they concluded that the partial obstruction to pulmonary circulation was localized to the small arteries in all cases. In these patients exercise produced no significant change in cardiac output. They sustained exercise only by a rise in A-V oxygen difference.

The work of P. H. Forsham, G. W. Thorn, L. Recant, and A. G. Hills on the *Use of Adrenocorticotrophic Hormone in*

the Evaluation of Adrenal Cortical Reserve in Man was discussed by Dr. Forsham. They studied the effects of injecting purified ACTH into human subjects. In the normal subject following a single dose of ACTH, the eosinophil count falls about 85% and the ratio of urinary uric acid to urinary creatinine rises about 80% in 4 hours. During prolonged administration of ACTH, marked sodium retention was observed in the normal subject, the urinary excretion of 11-oxy steroids in the normal subject increased to levels usually observed in Cushing's syndrome, and urinary 17 keto-steroids rose in all cases. Patients suffering from Addison's disease showed none of these effects. It was concluded that ACTH activates all functions of the adrenal cortex in man. Smaller than normal rises in the uric acid-creatinine ratio following administration of ACTH were observed in many pathological states. This was interpreted to indicate depletion of adrenal cortical reserve in these patients.

The Mechanism involved in the Breakdown of Circulating Leukocytes was studied by P. Fremont-Smith and C. B. Favour. They incubated concentrated suspensions of leukocytes at 37 C. with P.P.D. for one hour. Suspensions from the blood of patients with severe tuberculosis showed marked cytolysis whereas leukocytes from normal subjects were not lysed. The white cells of the tuberculosis patients studied lysed spontaneously when incubated alone in proportion to the presence of an "alarm reaction." When both mechanisms for white cell destruction were present, their effects were additive. A suspension of normal leukocytes was incubated with serum taken from a man before and after injection of ACTH. Only the lymphocytes incubated with serum taken after injection showed significant lysis. "Alarm serum" causes only lymphocytolysis. P.P.D. destroys both lymphocytes and neutrophils. In some patients this phenomenon may be used diagnostically.

C. E. Rath, Jr. reported studies made in

collaboration with C. A. Finch, J. G. Gibson 2d, and R. Fluharty on *Iron Transport*. He pointed out that the plasma contains only about 3 mgm of the total of 4 gm. of iron found in the body. The plasma iron is bound to a B globulin. The iron binding capacity and the iron content in the plasma of normal men and women is about the same. Normally the plasma is about 33% saturated with iron. In iron deficiency the iron binding capacity is somewhat increased whereas the saturation is often decreased to below 10%. The anemias of infection, on the other hand, are usually associated with a decreased iron binding capacity and only moderate decrease in % saturation. In hemochromatosis and hemosiderosis the iron binding capacity of the plasma is normal or slightly decreased but the saturation often is increased to 100%.

MEETING NO. 8

The May meeting of the Harvard Medical Society was held in Building D Amphitheater on the evening of May 11. The program was a symposium presented by the Department of Biology of the Massachusetts Institute of Technology. Dr. F. C. Schmitt presided.

Dr. J. R. Loofbourow discussed *Ultraviolet Microscopy and Spectroscopy, Including Low-Temperature Spectroscopy*. Methods were described for determining the absorption spectra of substances of biochemical substances at the temperatures of liquid nitrogen and liquid hydrogen. At these low temperatures, the spectra of many such substances, such as pyrimidines and sterols, show considerably greater detail. This is of use in differentiating between substances of similar molecular structure and has the possibility of application to clinical laboratory procedures, particularly to sterol determinations. Developments in ultraviolet microscopy and microspectroscopy at M.I.T. and at the Polaroid Corporation were discussed. These developments include simplified techniques as well as methods for yielding more detailed information of interest to

the cytochemist and pathologist. Color-translation microphotographs taken with the Polaroid ultraviolet microscope were demonstrated.

Dr. F. O. Schmitt discussed *Polarized Light and the Electron Microscope*. He first described the phenomenon of birefringence. Dr. Schmitt emphasized that many intracellular structures show birefringence if the method is sufficiently sensitive. He further pointed out that it could be observed in fresh tissue. Hence the method is valuable for detecting molecular orientation and submicroscopic organization of cells and tissues. Turning to electron microscopy, Dr. Schmitt said that resolving powers of 50 Angstrom Units could be quite readily obtained with present instruments. He described several techniques for making material "visible" in the electron microscope. These included "electron staining" (e.g. with phosphotungstic acid), shadow casting with heavy metals like gold, and making plastic models of material too thick to be observed under the electron microscope (i.e. greater than .1 micron thick).

Dr. Schmitt concluded his talk by showing slides illustrating the applications of polarization and electron microscopy in biology. These included studies of muscle fibers, cilia, sperm tails, retinal rods, chromosomes, dividing cells and several fibrous proteins.

Dr. Richard S. Bear spoke on *X-Ray Diffraction*. The diffraction method resembles the microscopic methods, except in the former's inability to form direct images of objects, so that diffraction patterns of the structures in question are registered instead. Its resolving power extends down to the sizes of smaller atoms and molecules, but in recent years the study of diffraction effects "at low angles" has furnished information regarding the colloidal ranges of size, overlapping those directly available with the electron microscope. In general, uses for the x-ray diffraction method are of two kinds: those leading to information regarding structure, and those furnishing identification or permitting illuminating classification of similar substances. Examples of these two applications were shown for the fibrous protein collagen, and certain related structures.

Dogs and Sherlock Holmes

EDWARD J. VAN LIERE, '20

It is gratifying to those who are interested in animals to know that two of the most popular heroes of detective fiction, namely, Sherlock Holmes and Doctor Watson, both loved dogs. They did not like them in a sentimental sense, but rather with a genuine masculine affection. They regarded them as dogs, not as human beings and emphasized and respected their canine personalities. I am certain that every self-respecting dog would want to be so regarded.

Sir Arthur Conan Doyle, the creator of Sherlock Holmes and Doctor Watson, makes frequent mention of dogs in his detective stories. In point of fact, the griz-

zly, spectral hound portrayed in his novel, *The Hound of the Baskervilles* has indeed become a by-word not only among readers of detective fiction but by the laymen in general.

Sir Arthur portrays various kinds of dogs: little dogs, big dogs, good ones and bad ones. In one instance he portrays a lovable curly-haired spaniel, in another a plodding bloodhound and in still another, a fiendish dog.

Let us consider some of the interesting references to dogs. Sir Arthur obviously understood thoroughly the nature of hounds and makes numerous allusions to them. He uses his knowledge of the traits

of these animals to describe some of the capricious methods of his hero, Sherlock Holmes.

In *The Sign of the Four* Watson describing Holmes in action writes: "So swift, silent, and furtive were his movements, like those of a trained bloodhound picking out a scent." And again (*A Study In Scarlet*): "As I watched him I was irresistibly reminded of a pure-blooded, well trained foxhound, as it dashes backward and forward through the covert, whining in its eagerness, until it comes across the lost scent." And further (*The Adventure of the Devil's Foot*): "... for all the world like a dashing foxhound drawing a cover." "... Holmes sat up in his chair like an old hound who hears the view-halloa." In *The Adventure of the Bruce-Partington Plans* we find a similar allusion: "See the foxhound with hanging ears and drooping tail as it lolls about the kennel, and compare it with the same hound, as with gleaming eyes and straining muscles, it runs upon a breast-high scent—such was the change in Holmes since the morning." And in *The Red-Haired League*, Jones, of Scotland Yard, speaking to his colleague, Wilson, comments: "Our friend Holmes here is a wonderful man for starting a chase. All he wants is an old dog to help him in the running down."

Sir Arthur mentions hounds more often than any other breed in his stories, using them in several instances to track down criminals. It will be recalled that in *The Sign of the Four* the dependable old hound Tobey follows a creosote scent. And in *The Adventure of the Missing Three-Quarter* faithful old Pompey follows a carriage which had aniseed squirted upon the wheel by Holmes who remarked to Watson: "A draghound will follow aniseed from here to John O'Groats."

Holmes takes almost a human interest in Pompey for he turns to Watson saying: "Let me introduce you to Pompey. Pompey is the pride of the local draghounds—no very great flier as his build will show, but a staunch hound on a scent . . . Now boy, come along and show what you can

do." However, he did not trust all dogs for we find him saying to Watson (*The Adventure of the Three Gables*): "Such hounds have a way sooner or later of biting the hand that feeds them."

Sir Arthur portrayed two especially fiendish dogs: Carlo, the mastiff, in *The Adventure of the Copper Beeches*, and the spectral hound in *The Hound of the Baskervilles*. In the former the despicable Rucastle, master of Carlo, said: "We feed him once a day, and not too much then so that he is always as keen as mustard . . . God help the trespasser whom he lays his fangs upon." Miss Violet Hunter, the heroine of the story saw this beast one night: "It was a giant dog, as large as a calf, tawny tinted, with hanging jowl, black muzzled, and huge projecting bones." Watson vividly describes the attack Carlo finally made on his master: "There was the huge famished brute, its black muzzle buried in Rucastle's throat, while he writhed and screamed upon the ground. Running up I blew its brains out, and it fell over with its keen white teeth still meeting in the great creases of his neck."

In the novel, *The Hound of the Baskervilles*, we find a hound described which would frighten the Evil One himself. Evidently this spectral beast was a mongrel. "It was not a pure bloodhound and it was not a pure mastiff; but appeared to be a combination of the two—gaunt, savage, and as large as a small lioness." Watson paints this animated picture: "A hound it was, an enormous coal-black hound, but not such a hound as mortal eyes have ever seen. Fire burst from its open mouth, its eyes glowed with a smouldering glare, its muzzle and hackles and dewlap were outlined in flickering flame." When this hound was worrying at the throat of Sir Henry, Holmes emptied five barrels of his revolver into the creature's flank. "With a last howl of agony and a vicious snap in the air, it rolled upon its back, four feet pawing furiously, and then fell limp upon its side."

Other breeds of dogs are not ignored,

however. Holmes who had considerable professional jealousy would not admit that Jones of Scotland Yard had the imagination a detective should have or that he had a keen intellect, but does pay him this fine compliment: "He is as brave as a bulldog . . ." (*The Red-Haired League*). In *The Adventure of the Crooked Man* we find: ". . . rebels round us, and they were as keen as a set of terriers round a rat-cage." Spaniels are also mentioned on at least two occasions. Dr. Mortimer in the story of *The Hound of the Baskervilles* has a curly-haired spaniel of which he is extremely fond. Unfortunately this lovable dog comes to grief on the moor. In *The Adventure of Shoscombe Old Place* a spaniel plays an important part in solving the mystery. "There are the Shoscombe spaniels . . . You hear of them at every dog show. The most exclusive breed in England." Holmes successfully uses one of these, a pet spaniel, to establish the fact that the person in the carriage is not the dog's mistress. "He thought it was his mistress and he found it was a stranger. Dogs don't make mistakes." This spaniel evidently lived happily ever after; at any rate he is never mentioned again.

Since Holmes was a detective and not a professional biologist he seldom found it necessary to use dogs for experimental purposes. On one occasion, however, he did not hesitate to try out the effects of a poison drug, curare, on an old dog which was *in extremis*. It will be recalled that according to Watson this poison caused instant death. (*A Study In Scarlet*). While not a biological scientist—as we understand the word today—Holmes was scientifically minded and it is certain that had the need arisen to obtain evidence which would have helped mankind he would not have hesitated to experiment on a normal healthy dog. He was a practical minded man in the fullest sense of the term and had, as Watson said, "[an] . . . admirably balanced mind." (*A Scandal In Bohemia*).

It is true that both Sherlock Holmes and Doctor Watson grieved when Dr. Mortimer's pet curly-haired spaniel met its fate on the moor and they loved Tobey, the faithful old bloodhound, who aided them in *The Sign of the Four*. But they did not hesitate to shoot five bullets into the flank of the hound of the Baskervilles when he was at the throat of Sir Henry, or to blow out the brains of Carlo, the mastiff, when he had sunk his teeth into the fat-neck of the villainous Rucastle. Holmes and Watson are not sentimentalists, but virile, vigorous men of action; the type of men dogs like.

Finally, Sir Arthur pays a touching tribute to dogs in general in his short story, *The Adventure of the Lions' Mane*. In this story it will be remembered that after McPherson died from his encounter with the Lion's Mane (*Cyanea capillata*), his pet airedale terrier eventually met a similar fate. According to the story related by Sherlock Holmes himself, the terrier did not eat for a week following his master's death, and finally followed the trail of its dead master. It was found dead on the edge of the same pool where his master had lost his life. It is true that the terrier did not have the opportunity of saving his master's life but no doubt would have, had it been possible to do so. The story portrays vividly the bond of companionship between a man and his dog, for in this instance the dog apparently gave his life searching for his master. Sir Arthur pays tribute to such servitude in the words of Sherlock Holmes: "That the dog should die was after the beautiful, faithful nature of dogs." This is a tribute that can be endorsed by all, but especially by biologists, who are so deeply indebted to the dog for the aid it has given them in their search for finding means to alleviate the pain and suffering of mankind. I am certain that every biologist, who professes to be a Christian gentleman, would say: "Amen" to Sir Arthur's beautiful tribute to an animal which would die that mankind might live.

O, Tempora, O Mores . . . !

Reminiscences by WILLIAM W. McKIBBEN, '00

Seated in a semicircle on the top floor of the Administration Center of the Massachusetts General Hospital one fine day in 1899 was a group of students who had been dreading the coming of this quiz hour for a whole week.

The instigator of this fear in our hearts was that excellent Harvard teacher, Dr. Reginald Fitz, of Arlington Street, Boston. Our gaze travelled from the little side door opening onto the floor of the amphitheatre (where the dreaded professor was to enter the lamb's den) to a wooden table on which was lying a little yellow man partly covered with a sheet. He was there to be diagnosed and to be used to teach us to think in logical sequence.

There was a certain comfort in casting a glance around and discovering so many uneasy faces. Then you knew you were not alone in your fear. But just why be nervous when only one or two men would be called down front? Your chance of being called was very slight, considering the laws of probability and chance.

At last the small door opened and in hurried a man not much taller than the one on the table. He was prompt, energetic, and aggressive. When he started to address the class he impressed me as one who would have made an excellent prosecuting or criminal attorney.

Dr. Fitz pointed out that we had a most excellent, unusually interesting, and highly instructive case to consider this morning—that the man who would be called down to diagnose the patient would be fortunate indeed. After consulting a little book he called my name. In spite of having just braced myself against fear, I grew dizzy and even a little nauseated. In his previous quizzes I had never dared answer to my name.

"Will you please respond promptly? Our time is short!"

Unfortunately for me, my neighbor to the left punched me in the ribs with his olecranon process. The alert prosecutor for the County of Suffolk saw the move.

"Are you McKibben?"

"Yes, sir," in a small voice.

"Then why don't you answer to your name?"

"I'm afraid, sir."

"Of what?"

"Of you, Professor Fitz."

"Just why?"

"Almost all of us are afraid to come down on the floor, sir. I've never dared answer to my name before. You make us feel awfully small by the time you get through with us, sir."

I managed to work my way down the steps until I stood like a lamb led to the slaughter before him.

"Just what do you see before you, young man?" he asked, removing the sheet.

"I see a diminutive yellow man, stocky and with good chest and shoulders; Mongoloid in type; high cheek bones, black, coarse pompadour hair; eye slits slanting upward and backward."

He interrupted with, "Which makes you think of what nationality?"

"Mongolian," I replied.

"From where, do you think?"

I opened my mouth and made a faux pas. "From the Malay Peninsula." I was getting in deeper all the time and now wanted to wiggle out of it.

"Couldn't he be a Mongolian who had wandered over to the Philippine Islands, for example?"

"Yes, sir, he looks very much like one."

"One what?"

"A Philippine Islander."

"Oh! You think so, do you? Have you in all your brief life actually seen a Philippine Islander?"

"Yes, sir."

"Where?"

"In the circus!" I was not trying to be funny; I was trembling.

Dr. Fitz seemed embarrassed. He now went through a most unusual pantomime, for he deliberately walked over to the wall, his face being not more than a foot therefrom. He locked his thumbs under

the tails of his cutaway coat and gave his forefingers a flip that sent his coattails flying upward and backward. At the same time he stuck his tongue way out on the right side of his upper lip and brought the end of his moustache into his mouth, and then did the same with his left, chewed on both ends nervously, about-faced and burst out with:

"As a matter of fact, McKibben, he is not a Mongolian at all, but was born in Portland, Maine, and has never in his life been west of the Hudson River or further away from his home than Boston. Now, just what is the matter with him?"

"Jaundice, sir."

"Exactly, acute or chronic?"

"I don't know yet. How long has he been sick?" I was becoming very wary and feeling my way along carefully.

"For six weeks."

"Sub-acute, sir."

"Very good," he said, with a smile.

As time went on, my respect for Dr. Reginald Fitz, Senior, grew into an affection for this most able internist. It would have been much easier for him if he had taken less trouble trying to get us to think and to have definite reasons for our conclusions, but he tried to develop in us the same keen, analytical minds as he possessed.

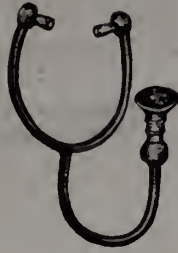
Internships Class of June 1948

<i>Name</i>	<i>Service</i>	<i>Hospital</i>
Adams, Jesse E., Jr.	Rotating	Harper, Detroit
Angle, William D.	Medical	Long Island College Hospital, Brooklyn
Applegarth, John J.	Medical	Roosevelt, New York
Austin, James H.	Medical	Boston City, Boston
Bates, Frank D.	Surgical	Albany Hospital, Albany
Beddingfield, Edgar T., Jr.	Rotating	Walter Reed, Washington, D. C.
Bell, George E., Jr.	Rotating	U. of Pa., Philadelphia
Bender, Merrill A.	Rotating	U. S. Naval Hospital, Bethesda, Md.
Bisland, Theodore	Medical	Hosp. of Faculty of Med. of Sao Paulo, Brazil
Blitzer, John R.	Medical	Peter Bent Brigham, Boston
Botwin, Arnold E.	Pathology	Beth Israel, Boston
Bougas, James A.	Surgical-Mixed	Bellevue Hospital, New York
Bragdon, Douglas E.	Mixed	U. S. Marine Hospital, Boston
Brown, Curtland C., Jr.	Medical	Albany Hospital, Albany
Burns, Stanley S., Jr.	Rotating	St. Louis City Hosp., St. Louis
Callaghan, Edward E.	Rotating	Worcester City, Worcester
Chamovitz, David L.	Rotating	Pittsburgh Medical Center, Pittsburgh
Chilmonczyk, Wacław	Medical	University Hospitals, Cleveland
Clark, Malcom D.	Rotating	Wisconsin General, Madison
Cobb, John C.	Pediatrics	Grace-New Haven, New Haven
Conerly, Dawson B., Jr.	Surgical	Vanderbilt U. Hospital, Nashville
Connolly, John E.	Surgical	Stanford U. Hospital, San Francisco
Criscitiello, Modestino G.	Medical	Peter Bent Brigham, Boston
Crocker Allen C.	Pathology	Children's Hospital, Boston
Davis, Jack B.	Rotating	Presbyterian, Philadelphia
dela Cruz, Edgar F. A.	Rotating	Passavant Mem'l Hospital, Chicago
Dodge, Harold T., Jr.	Medical	Peter Bent Brigham, Boston
Dolison, Dean M.	Rotating	Cleveland City, Cleveland

Drumny, William W., Jr.	Medical	Boston City, Boston
Evarts, Edward V.	Medical	Peter Bent Brigham, Boston
Fahl, James C.	Rotating	U. of Pa., Philadelphia
Ferry, Ronald M., Jr.	Rotating	U. of Pa., Philadelphia
Forrest, William W.	Rotating	U. of Pa., Philadelphia
Foss, Rodney H.	Rotating	U. S. Naval Hospital, Chelsea
Fremont-Smith, Kenneth	Medical	Boston City, Boston
Fulton, Lyman A.	Medical	Boston City, Boston
Funkhouser, Robert K.	Surgical	University Hospitals, Cleveland
Fyler, Donald C.	Medical	Bellevue, New York
Gibson, David M.	Rotating	Wesley Mem'l Hospital, Chicago
Gorlin, Richard	Medical	Peter Bent Brigham, Boston
Gothberg, Loren A.	Rotating	St. Luke's, Chicago
Grace, James T., Jr.	Rotating	St. Luke's, Chicago
Gray, Edward B., Jr.	Surgical	Peter Bent Brigham, Boston
Greenleaf, Kenneth R.	Surgical	Massachusetts Mem'l, Boston
Gundersen, Gunnar A.	Medical	Massachusetts Mem'l, Boston
Gundersen, Sigurd B., Jr.	Surgical	Massachusetts General, Boston
Haight, Thomas H.	Medical	Boston City, Boston
Hatch, Frederick T.	Medical	Roosevelt, New York
Hatt, William S.	Rotating	Queen's Hospital, Honolulu
Hay, Samuel H.	Medical	U. of Va., Charlottesville
Hiatt, Howard H.	Medical	Beth Israel, Boston
Hoagland, Mahlon B.	Surgical	Peter Bent Brigham, Boston
Hogan, John F., Jr.	Medical	Massachusetts General, Boston
Hopkins, William B.	Rotating	Medical College of Va., Richmond
Hough, Garry deN. III	Surgical	Massachusetts Mem'l, Boston
Hsia, David Yi-Yung	Rotating	Charity Hospital, New Orleans
Hum, Thomas Y.	Rotating	Faulkner Hospital, Boston
Huntley, Benjamin F. III	Medical	Duke University, Durham, N. C.
Ireland, Elwood F., Jr.	Rotating	Hartford Hospital, Hartford
Isenberg, Howard J.	Medical	Beth Israel, Boston
Jackson, William M.	Rotating	Henry Ford, Detroit
Jakovic, Louis G.	Rotating	Mt. Auburn, Cambridge, Mass.
Jahn, Paul H.	Surgical	Presbyterian, New York
Johns, Thomas R., 2d	Rotating	Faulkner Hospital, Boston
Junda, Rudolph J.	Rotating	Presbyterian, Chicago
Kellum, Agrippa S.	Surgical	Grady Mem'l Hospital, Atlanta
Kelly, Luther W., Jr.	Medical	University Hospitals, Cleveland
Kiyasu, William S.	Rotating	San Francisco Hospital, San Francisco
Lapham, Lowell W.	Medical	Boston City, Boston
Lewallen, Charles G.	Medical	University Hospitals, Cleveland
Linger, Robert T.	Surgical	Boston City, Boston
Love, Donald E.	Medical	Peter Bent Brigham, Boston
MacLeod, John A.	Rotating	Hartford Hospital, Hartford
Margulis, Rajko R.	Rotating	Henry Ford, Detroit
Mason, Roscoe E.	Surgical	Boston City, Boston
McCarley, Tracey H.	Rotating	U. of Pa. Hospital, Philadelphia
McCarty, William M.	Rotating	Lankenau Hospital, Philadelphia
McHale, Josiah A.	Rotating	St. Luke's, Chicago
McLemore, George A., Jr.	Medical	Peter Bent Brigham, Boston
Mendelsohn, Mortimer L.	Medical	Massachusetts General, Boston
Merrill, Joseph M.	Rotating	Louisville General, Louisville
Milam, Daniel F., Jr.	Surgery	Massachusetts General, Boston
Misrahy, George A.	Rotating	Springfield Hospital, Springfield, Mass.

Mond, Ernest	Rotating	Michael Reese, Chicago
Murray, Raymond H., Jr.	Medical	Peter Bent Brigham, Boston
Nagle, Walter W.	Rotating	Hartford Hospital, Hartford
Nakasone, Nobuyuki	Rotating	Mary Hitchcock Mem'l, Hanover, N. H.
Nicholson, Richard W.	Rotating	University Hospitals, Iowa City
Nielsen, Talmage W.	Surgical	Massachusetts General, Boston
Ohler, John H.	Medical	Boston City, Boston
O'Rear, Edgar A., Jr.	Rotating	Jefferson-Hillman, Birmingham, Ala.
O'Rourke, Paul F.	Rotating	Highland-Alameda County, Oakland, Calif.
Ortenburger, Arthur I., Jr.	Surgical	University Hospitals, Minneapolis
Parsons, David W.	Rotating	Presbyterian, Chicago
Peabody, Charles N.	Surgical	Massachusetts Mem'l, Boston
Pechet, Maurice M.	Pathology	Children's Hospital, Boston
Peterson, Herbert G., Jr.	Medical	Royal Victoria, Montreal
Phillips, Gerald B.	Medical	Presbyterian, New York
Pratt, George F.	Surgical	Massachusetts Mem'l, Boston
Prindle, Richard A.	Surgical	Presbyterian, New York
Prout, Thaddeus E.	Medical	Boston City, Boston
Radding, Philip	Rotating	U. S. Naval Hospital, St. Albans, L. I.
Rattan, Walter C.	Mixed	Henry Ford, Detroit
Ravin, Herbert A.	Medical	Beth Israel, Boston
Rehbein, Alfredo	Surgical	Presbyterian, New York
Richardson, Fred W.	Rotating	Beverly Hospital, Beverly, Mass.
Ritter, Emil R.	Rotating	Rhode Island, Providence
Roberts, Thomas N.	Medical	New York Hospital, New York
Rosa, Franz W.	Medical	Vanderbilt University, Nashville
Rudin, Donald O.	Medical	Boston City, Boston
Rutledge, Ralph L.	Medical	Peter Bent Brigham, Boston
Scott, Alfred W.	Rotating	Philadelphia General, Philadelphia
Sears, E. Manning	Pathology	Children's Hospital, Boston
Shaw, Ian A.	Rotating	Swedish Hospital, Seattle
Simkus, Albert A.	Rotating	Charity Hospital, New Orleans
Smith, Blaine L.	Rotating	Santa Barbara Cottage, Santa Barbara
Smith, L. Hollingsworth, Jr.	Medical	Massachusetts General, Boston
Snow, Joseph C.	Surgical	Boston City, Boston
Soule, William C.	Mixed	King's County, Brooklyn
Southwick, Christopher H.	Rotating	Hartford Hospital, Hartford
Spence, David L.	Rotating	Germantown Hosp., Germantown, Pa.
Steenburg, Richard W.	Surgical	Peter Bent Brigham, Boston
Stodder, C. Paxton	Medical	Massachusetts Mem'l, Boston
Stoeckle, John D.	Medical	Massachusetts General, Boston
Taylor, Billy G.	Surgical	Grady Mem'l Hospital, Atlanta
Taylor, Robert G.	Rotating	Wesley Mem'l Hospital, Chicago
Teter, J. Gordon	Surgical	Boston City, Boston
Thompson, Clarence T.	Rotating	Charity Hospital, New Orleans
Tikellis, Ignatius J.	Rotating	Delaware Hospital, Wilmington
Troen, Philip	Medical	Boston City, Boston
Vail, David J.	Rotating	St. Luke's, Chicago
Vecchio, Thomas J.	Medical	Boston City, Boston
Vizcarrondo, Raul C.	Rotating	Touro Infirmary, New Orleans
Webster, Leslie T.	Rotating	Cleveland City, Cleveland
White, Orson W.	Medical	Peter Bent Brigham, Boston
Wilcox, Roger E.	Surgical	Massachusetts General, Boston
Witherington, Dexter T.	Surgical	U. of Va., Charlottesville
Wooten, Greenwood S., Jr.	Rotating	Charity Hospital, New Orleans
Wulsin, Howard E.	Rotating	Memorial Hospital, Worcester
Zullo, Robert J.	Rotating	U. S. Naval Hospital, Long Beach, Calif.

The Stethoscope



Anyone will agree that the 25th reunion of the Class of 1923 was successful. It is indeed a unique class: the first one to claim as a member at its reunion the President of the American Medical Association; the first to own an Atlantic Monthly writer and a poet; the first to present the Dean at such a reunion with a mammoth cheque and at the same time to introduce him to a galaxy of wives, each one apparently younger and more beautiful as the years roll on. In its itinerary the class included a meeting with the Dean who gave an interesting clinic wherein he diagnosed the present health of the School; a visit to the Department of Physiology where Professor Landis contrasted the 1948 teaching model with that of 1923; a visit to Biochemistry where Professor Hastings recalled his first meeting with Henry Martin. Henry came to the School in 1896 and served until 1938, thus knowing Dr. Wood, Drs. Arlsberg and Henderson, Dr. Folin and extending a welcome to Dr. Hastings. His reception of the latter was characteristic: he told Dr. Hastings that Dr. Wood had been unusually talented as a urinary prophet, that Dr. Henderson had attempted to make Ph an understandable term to a series of classes, with almost total lack of success, and that Dr. Folin had been interested in blood. "And now" he said, "I understand that you are a good urinary prophet, that you know all about hydrogen ions and the Mass Law and also that you like blood chemistry. I hope that you can make all these things clearer to your students than your predecessors were able to

do for the boys I brought up here!" Dr. Hastings proceeded to demonstrate how modern knowledge and methods made this possible. The visit ended in the Department of Legal Medicine where members of the Class had a chance to display their abilities as disciples of Sherlock Holmes. The School enjoyed the reunion as much as did the visitors.—The manner in which members of the Teaching Staff are reported to speak in public makes an interesting study. According to the newspapers Professor Ronald Ferry is using the electric eye to detect and count airborne germs. Professor Paul D. White, H.M.S. 1911, claims the thin man is seldom a victim of heart disease. Professor Clement A. Smith says that babies are rugged individuals and can go as long as fourteen minutes without breathing after birth. So well known an historian as Professor Frederic C. Irving, H.M.S. 1910, has at last settled the ether controversy, for all time, "There can be no doubt that Crawford Long actually performed the first operation under anesthesia. Even the staunchest son of the Massachusetts General Hospital and the most uncompromising Bostonian must admit it!" Professor Charles A. Janeway hopes that the use of gamma globulin may prevent many cases of blindness and that advances in the fight against tuberculosis, cancer, heart disease and allergic disorders such as hay fever, are possibilities for further research on other substances derived from blood. Dr. Roger I. Lee, H.M.S. 1905, from deep in the heart of Texas, predicts that the Southwestern Medical Foundation will in a reasonably short time become the medical Mecca of the nation. Our dermato-endocrinologists appear on the verge of discovering something very curious in the medical line: one says that overexposure to sunlight is a cause of baldness and another that baldness is a sign of virility. This is comforting news in summertime to those of us whose hair is receding but who, all the same, still enjoy playing golf or tennis without any hats.

Reid Hunt

1870-1948

Of the galaxy of distinguished investigators and teachers, who in the current century have come to Harvard from Johns Hopkins, few have more distinctly borne the stamp of our great sister university than Reid Hunt. In addition, his years of training at Frankfurt bestowed upon him the best of German and European culture and tradition, and developed in him the enthusiasm and accuracy of research which were to characterize his professional life. He was an earnest and gentle spirit, who dwelt so quietly among us that only his intimates fully realized the depth of his nature, the importance and scope of his achievements, the influence which he exerted upon his students and upon the scientific advances of his time.

Reid Hunt was born at Martinsville, Ohio, on April 20, 1870, of Quaker ancestry from Virginia. He attended Wilmington College and Ohio University; but later went to Johns Hopkins, where he received his A.B. degree in 1891. In 1892 he studied pharmacology in Germany under Binz and Nussbaum, from whom he acquired the foundation of his training in scientific technique. Resuming his work at Baltimore, he obtained his Ph.D. in physiology under Howell in 1896, and concurrently received his doctorate in medicine from the University of Maryland.

Pursuing his determination to apply chemical methods to biological problems, Dr. Hunt spent the next summer in Chicago, with Loeb and Stieglitz, investigating poisonous plants which had caused many fatalities among cattle in the West. For the next two years, from 1896 to 1898, he taught physiology as a tutor in the New York College of Physicians and Surgeons at Columbia University.

In 1899, Columbia sent an expedition to Egypt to study, in the Sudan and upper Nile, the *Polypterus*, considered to be the ancestral form from which all fish are descended. Hunt enthusiastically joined

this expedition and remained with it for more than two years. But while it was at Wady Halfa, he and two of his comrades contracted a febrile infection. Harrington died; and Hunt undertook to transport Saunders across the desert, behind an escort of military convicts, to care and safety. The courage, determination, and success with which he accomplished this dangerous enterprise were characteristic of his entire life: his devotion to science was of the same stamp as his fidelity and loyalty to his friend.

Returning briefly to the United States after the Sudan expedition, Dr. Hunt went next to Frankfurt, where he spent the years 1902 to 1904 studying under Ehrlich, who was then engaged in investigating the relationship of the structure of organic compounds to their physiological action. It was under this influence that Hunt began his own important studies on quinine, and it was this association and experience that fully moulded his character and determined the interests that guided the remainder of his life.

Returning again to the United States in 1904, Dr. Hunt was offered and accepted the position of Chief of the Pharmacological Division in the Hygiene Laboratory of the United States Public Health Service. Here he served during the ensuing decade and did much of the research upon which rests his permanent reputation as a distinguished pharmacologist. His first major contribution is embodied in his paper on the accelerator nerves of the heart. He demonstrated the balance between the sympathetic and the parasympathetic systems, and explained the mechanism of the nervous control of the heart-beat. His earlier investigations of the cholines resulted in the discovery of the action of acetylcholin on the blood-pressure. He demonstrated thyroid hormone in human blood, devised methods for the standardization of thyroid substances, and made fundamental studies on the toxicity and

physiological action of methyl and ethyl alcohols. Broadly trained in biology and pharmacology, he combined to an extraordinary degree the ideal research qualities of technical proficiency, imagination, insight, and scholarship.

In 1908 Dr. Hunt was married at Washington, D. C., to Miss Mary Lillie Taylor, who became the constant and devoted comrade of all his activities and interests, and who survives him.

In 1913 Dr. Hunt was called to become Professor of Pharmacology at the Harvard Medical School, and in that capacity taught with distinction and continued his important researches. During these years, his studies on the toxicity of the arsphenamine preparations rendered invaluable service toward the safe and effective clinical use of these therapeutic agents. He was for many years Chairman of the Council on Pharmacy and Chemistry of the American Medical Association, and from 1920 to 1930 was President of the Pharmacopoeial Convention. He was a member of the Drug Standardization Committee of the League of Nations, the American Academy of Arts and Sciences, the Association of American Physicians,

the American Physiological Society, the American Chemical Society, the American Society for Pharmacology and Experimental Therapeutics, and the National Academy of Sciences.

Dr. Hunt was profoundly and sincerely admired, beloved, and respected by his students at the Harvard Medical School, who, upon his retirement as *Emeritus* in 1937 dedicated to him the *Aesculapiad* of that year. He continued to reside in Boston until his death on March 7, 1948, and maintained to the last his keen interest in the School and in problems of research in the science which his contributions and discoveries have so greatly enriched. Aloof, dispassionate, modest, shy, unaggressive, and "erudite to an encyclopaedic degree", he had an integrity, simplicity, and sincerity of character, a detachment and impersonality of thought, which were exemplified in the honesty of purpose and devotion to truth that were invariably expressed in his private and professional life. His funeral services were held at the Harvard Memorial Chapel on March 10, and a commemorative meeting in his honor was conducted on May 10 at the Harvard Medical School.

ROBERT M. GREEN, '06



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EDITORIAL

RATS

A press release date-lined from Atlantic City announces the recent discovery by Yale scientists of why people eat more in cold weather than in hot weather. It is because eating in hot weather makes people hotter and eating in cold weather makes them warmer. This thesis—referred to as the “Yale theory”—culminates nine years of research in the Yale School of Medicine, according to the Yale University News Bureau press release.

This thesis was not enunciated without due scientific proof. Sixty rats were kept in rooms of varying temperatures for several months, and scientific observations showed that they ate less when overheated than when cold. Furthermore, those rats which ate too little food lost weight, (accurately expressed in grams). The additional observation that the rats in

very hot rooms “ran fevers” was accounted for on the theory that rats, unlike humans, cannot sweat. “Their body temperatures went as high as 104 degrees” we are told. For those not in the know, “this would compare with a human fever of 102 degrees.” Two striking applications of the Yale theory are cited—the lethargic football team “on a warm October day after a heavy meal”, and “the loss of appetite associated with ‘Spring fever’ or extraordinarily hot weather.” To bring this all within the range of an ordinary intelligence the essayist’s own words are used in a single quotation: “Expressed in its broadest form, the hypothesis presented here states that animals eat to keep warm, and stop eating to prevent hyperthermia (becoming overheated).”

The writer of the present editorial feels no inclination to belittle the “Yale theory” or the years of research on which it rests—on the contrary he is relieved to know why football teams are lethargic in October, and is glad to be able to regard the Spring drop in his food bill as biologically normal. Neither is he inclined to lend a readier ear to those empiricists who define specialization as knowing more and more about less and less. He does, however, feel indebted to the Yale University News Bureau press release, reviewed above, for a more active appreciation of Lester Grant’s article on “Some Problems of Reporting Medicine” contained in the *Nieman Reports* of January 1948 and reprinted in the *Harvard Medical Alumni Bulletin* for April 1948. Mr. Grant, speaking as a newspaperman, believes the quality of medical reporting is on the mend, and attributes the improvement to the fact that scientists are making themselves more accessible. “If the atom bomb has helped to accomplish this”, he says, “perhaps it has served at least one useful purpose.”



Book Reviews

NEUROLOGY OF THE OCULAR MUSCLES by David C. Cogan, M. D., Springfield, Illinois: Charles C. Thomas, 1948 pp. 229. Price \$6.00.

Some defect in the use of the twelve small muscles that move the eyes is one of the most common signs of structural disease of the nervous system. The delicate balance of muscular tension and relaxation forms the classic example of control of muscular movements in the body by reciprocal innervation through central nervous connections. Except for the remarkable ability of compensation for imbalance, diplopia should be one of the most frequent signs of disease instead of a comparatively rare complaint. It is common enough however to be an important sign of neurological disorder and thus a study of these muscles and their connections, both peripheral and supranuclear, is *sine qua non* to the intelligent practice of medicine, particularly neurology. Such a simple and straightforward study has been provided by the author, with succinct text and pertinent illustrations. Originally given as lectures in a postgraduate course for ophthalmologists, in their printed form they also serve other students. Based on signs and symptoms, such as occur in the clinic or in practice, the author emphasizes the localizing value of abnormalities and thus leads to the diagnosis of a particular condition. As treatment in general is not considered, the book is a diagnostic manual, serving as an introduction or a review, depending on the state of the reader's previous experience. Well printed and produced, with adequate references and index, but without full credit given in some captions to the source of the excellent illustrations, this book, written for the specialist and covering only a small segment of a large field, should prove useful for a re-orientation of the subject.

HENRY R. VIETS, '16

SIGNS AND SYMPTOMS: THEIR CLINICAL INTERPRETATION. Edited by Cyril Mitchell MacBride, M.D., F.A.C.P., J. B. Lippincott, Phila., 1947, 439 pp. Price \$12.00.

Without being an Index of Differential Diagnosis nor a text-book of Human Physiology, Biological Chemistry or Monographic Medicine,

this book fulfills some of the purposes of all four. That its primary concern is diagnosis is implicit in the title, but it is far from being an uncritical grouping of signs and symptoms into stock diagnostic patterns. Rather it attempts to explain the mechanisms that produce familiar symptoms and signs and to relate these mechanisms to the important disease entities. The clinical appearance of a disorder is described together with the anatomical, physiological, chemical, psychiatric, and perhaps also the statistical, experimental and historical explanation of why it is so. One gets the effect of watching a puppet-show both from in front and in back simultaneously. Such an approach restores the original meaning which the word diagnosis is in danger of losing through our unfortunate tendency to substitute ready-made labels for "understanding through."

There are 27 chapters, of which 9 deal with pain and its variants in different parts of the body. The others discuss history-taking, fever, unconsciousness, dyspnea, cyanosis, fluid imbalance, pulse variations, cough, hemoptysis, weight abnormalities, vomiting, bowel habits, G.I. tract bleeding, jaundice, nervousness and fatigue. Thanks to Dr. MacBryde's skillful editing, the presentation of twenty contributors are so arranged as to retain their individuality without unpleasant repetition, irrelevancy or change of pace. Wolff's section on Headache, largely based on his original work, is especially outstanding. The book as a whole makes no attempt at encyclopedic completeness so far as disease entities are concerned. For example, the section on Abdominal Pain omits mesenteric adenitis, mesenteric thrombosis and dissecting aneurysm, but describes all the mechanisms by which abdominal pain may be reduced. Such omissions cannot be considered a fault. On the other hand, there are wholly unexpected inclusions, such as a discussion of the utility of fever for example, which are quite refreshing.

This book covers such a wide range of subjects and considers them from so many instructive view-points from the most academic to the most practical, that its usefulness can hardly be limited to any one class of medical readers. The student, the teacher and the practitioner will all find something helpful in it. It can be studied methodically from cover to cover or used as a reference book when time presses. The index is excellent. It should be particularly welcome to the busy individual confronted with the task of discussing a Clinico-Pathological case. Vagueness about the causation of signs and symptoms need not be one of his worries. For the more leisurely student a good bibliography is included at the end of each section.

HORATIO ROGERS, '23.

BARBED WIRE SURGEON. By Alfred A. Weinstein, M.D., New York: The Macmillan Company, 1948. Price \$3.00.

Alfred Weinstein graduated from Harvard College in 1929, and from Harvard Medical School in 1933. After post-graduate training, he engaged in the practice of surgery in Atlanta, Georgia. A Reserve Officer, he was called into active military service in 1940, and volunteered in the Philippines.

Barbed Wire Surgeon, his first novel, is a poignant, gripping account of his army experience, beginning at Fort McKinley in the Philippines on December 8, 1941, and concluding with the allied victory and liberation more than four years later.

The first sickening roar of bombs exploding about his hospital on the first day of the war, the retreat to Bataan, the prolonged siege, the capture of doctors, nurses and medics, laboring to care for the wounded and to protect the sick, are vividly portrayed. Eighteen thousand men and women succumbed to starvation and disease, or perished as a result of the physical abuse and brutality of their captors. Weinstein was one of the four thousand who survived. For forty endless months he was physician to his fellow prisoners; first at Little Baguio, Bataan; later at Camp O'Donnell; then at Cabanatuan Prison. Finally, he was shipped in a prison transport to Japan.

He and his fellow captives suffered every conceivable torture. They were ravaged by malaria, pneumonia, beri beri, pellagra, amoebic and bacillary dysentery. Starved and exhausted, frequently and brutally beaten by their guards, they lacked food, clothing, decent shelter and medicine. That even the strongest survived can be ascribed solely to their integrity of character, steadfast courage and ingenuity. Against the cruelty and stupidity of their powerful jailors, these prisoners pitted their own group solidarity, their own espionage, cunning and intelligent insight.

Deftly and skilfully the author unrolls the tragic and moving record of events. The long harrowing months of the Japanese punishment camps and prisons were finally lightened by Allied victories, news of which was occasionally smuggled to the men through written notes from the underground, short wave radio and infrequent newspapers. Chiefly, however, the prisoners survived by reason of irrepressible humor and the intrepid spirit of men who, like the author, simply refused to die.

Barbed Wire Surgeon is a compelling and absorbing story from first to last. In writing it, Dr. Weinstein has performed a valuable service. For while we must forgive those who trespass against us, it would be folly to forget.

HERRMAN L. BLUMGART '21

HARVARD MEDICAL SOCIETY OF NEW YORK—

The Annual Meeting of the Society was held on April first at the Harvard Club and the following officers were elected for the year: Fred Stewart '24, President; Russell Patterson '18, Vice-President; Ralph Gause '30, Treasurer; George Wheatley '33, Secretary. The speaker of the evening was Dr. Harry L. Shapiro, Chairman, Department of Anthropology, American Museum of Natural History, who talked about the Pitcairn Islanders.

The Society has an interested group of Medical School graduates and meets twice a year. They have a membership of 103 at present.

The Massachusetts Division of the American Cancer Society, Inc. has granted Massachusetts General Hospital about \$2,500, donated in memory of the late Robert N. Nye, ('18). The sum will be used to initiate and at least partly support the Robert Nason Nye Memorial Study. This study, a long desired project of the x-ray department of the hospital where Dr. Nye served his internship, is concerned with the evaluation of changes in the peripheral blood correlated with known amounts of exposure to radiation sustained by the employees and staff of the x-ray department. Among other subjects to be studied is the incidence of leukemia among workers.

NOTICE

The Alumni Office is anxious to obtain a copy of the 1922 Aesculapiad. If you have a copy which you do not want, please notify the Harvard Medical Alumni Association, 25 Shattuck St., Boston.

